
LD 56: Flexible Tones and Cadences

Flexible Tones and Cadences (FTC) is an optional feature which is used to customize the tones provided to telephone users. FTC is primarily intended for international markets where tones which are different from the North American defaults are required.

Overlay program 56 allows the implementation and administration of tone and ringing parameters for one or more customers. If the FTC feature (package 125) is not equipped, North American tones and cadences are used.

An FTC table number can be entered for each trunk route at prompt TTBL in LD 16. Table 0 is the default for all trunk routes and contains the defaults for North America.

What are tones and cadences?

Tones are used to provide call status to telephone users. A tone is defined by both the frequency and volume of the sound.

Tones are provided in on and off phases. One or more cycles of on/off cycles make up a tone's cadence. For example, the default cadence for normal North American ringing is 2 seconds on, 4 seconds off, 2 seconds on, 4 seconds off, and so on.

Flexible Tone and Cadence (FTC) Tables

FTC tables define the tones and cadences used for various calling features. Up to 31 FTC tables can be created. Each table can be associated with one or more trunk routes by entering the table number in response to prompt TTBL in LD 16.

Master Cadence Table (MCAD)

The Master Cadence Table (MCAD) defines cadences that are controlled by software. These are used for single line sets (500/2500) and digital sets.

The MCAD can have 256 entries (0-255). Each entry can have up to 10 on/off phases each. Entry 0 is reserved for continuous tone and cannot be changed. Entries 1-15 are reserved for ringing cadences.

Most of the software cadences are continuously repetitive unless it is specified that the tone should end after the last phase. There are four exceptions to this rule: prompts ACBT, AOBT, INTU and OVRD cadences repeat the last 8 phases. This allows a special initial tone burst to be defined. To have the first cycle repeat, it must be defined as both the first and last cycle.

A cadence is defined at the CDNC prompt by entering the time for each on and off phase. The time depends on the settings for the TMRK prompt in LD17 which defines the software cadence increments as 96 or 128 ms. For each phase, enter the closest multiple of 5 ms equal to the multiple of 96 or 128 ms which gives the a time Š the time required.

The range for the first phase is 1-9999. The range for the second phase is 0-9999. Once an MCAD entry has been created, it can be changed but not removed.

For example, given LD 17 TMRK is set to 128 ms, and a repeating 2 seconds on, 4 seconds off cadence is required.

- 1 Determine the ON phase (2 seconds = 2000 ms)
 $2000/128 = 15.625 = 16$ (always round up)
 $128 \times 16 = 2048$ ms
 multiple of 5 closet to 2048 ms = 2050
 Entry for prompt CDNC = $2050/5 = 0410$
- 2 Determine the OFF phase (4 seconds = 4000 ms). By using the same calculation, the entry for prompt CDNC = 0820.
- 3 To define the cadence, respond to the prompts as follows:

REQ NEW, CHG
TYPE MCAD
WCAD 1-255
CDNC 0410 0820

To define the cadence: 2 s on, 4 s off, 4 s on, 2 s off, repeat cycle 1 and 2, enter:

CDNC 0410 0820 0820 0410

To define the cadence: 2 s on, then steady off, enter:

CDNC 0410, or
CDNC 0410 0000

If an odd number of non-zero phases are entered, software ends the tone after the last ON phase. Once a zero phase has been entered, it cannot be followed by non-zero phases. A carriage return at any phase results in zero for the remaining phases.

Once the cadence is defined, it can be entered in response to the CDNC prompt for a given feature. For example, CDNC is output after the Call Waiting tone prompt.

Firmware Cadence Table (FCAD)

The Firmware Cadence Table (FCAD) defines cadences that are controlled by an NT8D17 Conference/TDS/MFS card.

The FCAD can have 256 entries (0-255). Each entry can have up to 10 on/off phases. Entry 0 is reserved for continuous tone and cannot be changed. Entries 1-15 are reserved for ringing cadences. Each phase is in multiples of 5 ms.

FCAD cadences have the following capabilities:

- Each cadence may be defined to end at the “on” phase, the “off” phase, or repeat after a single pass through the defined on/off cycles. Any or all of the five cycles can be repeated.
- Unique tones can be defined for each “on” phase. These tones are permanently held in the Conference/TDS/MFS firmware.

In order to have the same cadences on 500/2500/digital telephones and SL-1 telephones, the MCAD and FCAD entries 0-15 are identical. Changes to MCAD entries 1-15 automatically change FCAD entries 1-15. The FCAD entries 1-15 can only be changed by changing the MCAD entries 1-15.

The Conference/TDS/MFS card must be disabled and then re-enabled to download changed firmware cadences.

Examples of creating firmware cadences:

1 For a cadence of 2 s on, 4 s off, repeat:

```
REQ NEW, CHG, PRT
TYPE FCAD
WCAD 1-255
CDNC 0410 0820
```

```
END REPT
CYCS 1 (on/off cycles to be repeated)
WTON NO (use default tone for this cadence)
```

2 For a cadence of 2 s on, 4 s off, 3 s on, 5 s off, repeat:

```
REQ NEW, CHG, PRT
TYPE FCAD
WCAD 1-255
CDNC 0410 0820 0614 0998
```

```
END REPT
CYCS 1 2 (on/off cycles to be repeated)
WTON NO (use default tone for this cadence)
```

3 For a cadence of:

```
0.1 s on at 950 Hz, 19 dB below overload A-law, 0.1 off
0.1 s on at 1400 Hz, 20 dB below overload A-law, 0.1 off
0.1 s on at 1800 Hz, 20 dB below overload A-law, steady off
REQ NEW, CHG, PRT
TYPE FCAD
WCAD 1-255
CDNC 0020 0020 0020 0020 0020
```

END OFF

WTON YES (define tones for this cadence)

TONES 134 135 136 (See NT8D17 Conference/TDS tone table)

TDS and NT8D17 Conference/TDS/MFS cards

There are two types of cards providing tones and cadences:

- Tone and Digit Switch (TDS) cards
- NT8D17 Conference, TDS and Multi-Frequency (MF) Sender card

There are a variety of TDS cards. Each card provides a different set of tones and cadences. When a TDS card is used for SL-1 sets, each tone and cadence is identified by a hexadecimal code. The decimal equivalents for these hex codes are entered at the TDSH prompt for each calling feature.

Refer to the the *Flexible Tones and Cadences* NTP for the appropriate codes.

When the NT8D17 Conference/TDS/MFS cards are used, the tones and cadences are defined by the following prompts:

- XCAD = 0-255 - entry in the Firmware Cadence Table (FCAD)
- XTON = 0-255 - tone stored in the card firmware
- CDNC = 0-255 - entry in Master Cadence Table (MCAD)

The ringing cadences for all telephones use the Master Cadence Table (MCAD). MCAD entries 1-15 are downloaded to the Peripheral Controller to provide ringing.

Time interval for Call Forward

For Call Forward No Answer (CFNA), the time interval before a call is forwarded is measured by the time interval for one ring cycle (defined at NCAD prompt) times the number of ring cycles (defined at CFNA prompt in LD 15).

All other types of ringing forward a call after this same time interval regardless of cadence. For example, those with a faster cadence will forward after more rings, those with a slower cadence after fewer rings.

Installing FTC

These steps outline the process to install the FTC feature and change the default tones and cadences for one or more calling features.

To assist in fault clearing, it is recommended that you keep a record of all changes.

- 1 Load Overlay 56
- 2 Define new MCAD cadences
- 3 Define new FCAD tones and cadences
- 4 Create one or more FTC tables (one for each trunk route requiring different tones and cadences)
- 5 Define the non-default tones and cadences for each FTC table
- 6 Enter the FTC table number for each trunk route (LD 16 prompt TTBL)
- 7 If a Conference/TDS/MFS card is equipped, then follow these steps:
 - a set options in LD 97
 - b initialize the system (INIT)
 - c disable and enable each Conf/TDS/MFS card (LD 34)
 - d disable and enable each Controller (LD 32)

Note 1: The Master Cadence Table (MCAD) defines cadences that are controlled by software. These are used for single line sets (500/2500) and digital sets.

MCAD can have up to 256 entries (0-255). Each entry can have up to 10 on/off phases. Entry 0 is reserved for continuous tone and cannot be changed. Entries are reserved for ringing cadences.

To define an MCAD cadence, enter the time for each on and off phase. Phases are in 5 ms increments. For example, enter 200 to have a phase last 1 second ($200 \times 5 \text{ ms} = 1000 \text{ ms} = 1 \text{ second}$).

The range for the first phase is 1-9999. The range for the second phase is 0-9999. Once an MCAD entry has been created, it can be changed but not removed.

Note 2: Prompts with the response i bb c tt are only prompted for systems equipped with Tone and Digit cards.

- i = internal (0) or external (1) source
- bb = burst
- cc = cadence
- tt = frequency/level

Prompts with the response i bb c tt define the Internal/External source, burst, cadence and frequency/level respectively. Enter the decimal equivalent (0-15) of the TDS Hex code (refer to 553-2711-180).

The first field is usually 0. If an external source is used the entry is 1 and the fourth field is 0-7 for the specified channel.

Note 3: The Firmware Cadence Table (FCAD) defines cadences that are controlled by the NT8D17 Conference /TDS/MFS card. These are used for SL-1 sets.

The FCAD can have up to 256 entries (0-255). Each entry can have up to 10 on-off phases. Entry 0 is reserved for continuous tone and cannot be changed.

FCAD cadences have the following capabilities:

- each cadence may be defined to end on the ON phase, OFF phase or repeat after a single pass through all defined on-off cycles. Any or all of the five on-off cycles can be repeated.
- a unique tone can be defined for each on phase. These tones are permanently held in the Conference/TDS/MFS firmware.

In order to have the same cadences for 500/2500 Digital and SL-1 sets, the MCAD and FCAD entries 0 through 15 are identical. Changes to MCAD entries 1 through 15 automatically change MCAD entries 1 through 15. FCAD entries 1 through 15 cannot be changed without changing the MCAD entries.

Note 4: The cadences for Software Controlled Cadence Tones AOBT (Agent Observe Tone), INTU (Intrusion tone) and OVRD (Override tone) do not repeat in the same manner as the other tones. All other tones repeat all on-off cycles from the first up to the fifth if all ten on and off times are programmed. However, these tones reserve cycle 1 for special use, providing a tone burst of a different length if desired, to emphasize the initial iteration of the tone cycle.

Note 5: A cycle of 200 3200 50 3200 will have a 200 millisecond tone followed by 3.2 seconds of silence. After this initial burst, the tone will repeat in a 50 millisecond on, 3.2 seconds off pattern as long as the time remains valid. However, if the pattern is intended to not have an initial burst, the first two entries must be repeated as the last two entries to obtain the correct sequence.

As an example, if the desired tone is repeating sequence of 50 ms on, 100 ms off, 100 ms on, 50 ms off, 50 ms on, 3500 ms off, the entry must be as follows:

50 100 100 50 50 3500 50 100

Intrusion Tone Note for Option 11

The following settings are recommended when programming the Intrusion tone on an Option 11.

Prompt Response

```
INTU
XTON 175
XCAD 19
CDNC 19
MCAD 1914 25 14 2000
FCAD 1914 25 14 2000
END   REPL
CYCS 2
```

Prompts and responses

Table of Contents

Section	Page
<i>Prompts and responses by data block :</i>	
DTAD: Special Dial Tone After Dialed Number data block	695
FCAD: Firmware Cadence data block	696
FDTD: Flexible Dial Tone Detection data block	696
FTC: Flexible Tones and Cadences data block	697
MCAD: Master cadence data block	707
RART: Route Access Restriction table data block	707
RCDT: Route Category Default Table data block	707
TBAR: Trunk Barring data block	708
Print a customer defined route's ART course	708
<i>Other Information :</i>	
Default Firmware Cadence (FCAD) tables	710

DTAD: Special Dial Tone After Dialed Number data block

Prompt	Response	Comment
REQ	aaa	Request
TYPE	DTAD	Type of data block = DTAD (Special Dial Tone After Dialed Number)
DDGT	x...x	Dialed digits (1-5 digits)
- TONE	a...a	Tone to be provided after the dialed digits (a...a = (DIAL), SPDT, or SRC-SRC8)

FCAD: Firmware Cadence data block

Prompt	Response	Comment
REQ	aaa	Request
TYPE	FCAD	Type of data block = FCAD (Firmware Cadence)
WCAD	0-225	Cadence Number (0 is reserved for continuous tone and cannot be changed)
CDNC	xxxx xxxx ... xxxx	Cadence
END	a...a	End treatment for cadence (a...a = REPT, ON, or OFF)
- CYCS	x x x x	Cycles
- WTON	(NO) YES	Define Tones associated with the cadence
- - TONES	ttt ttt ...	NT8D17 tones (0-255) to be used with each phase of the cadence

FDTD: Flexible Dial Tone Detection data block

Prompt	Response	Comment
REQ	aaa	Request
TYPE	FDTD	Type of data block = FDTD (Flexible Dial Tone Detection)
TABL	0-31	Table number
ACNO	1-4	Access Code Number
- OACn	x....x	Outgoing Access Code (1-4 digits)
- DTPn	(YES) NO	Dial Tone Post-dial
- CNT	(0)-15	Count
DGTS	x...x	Digits

FTC: Flexible Tones and Cadences data block

An FTC table number can be entered for each trunk route at prompt TTBL in LD16. Table 0 is the default for all trunk routes and contains the defaults for North America.

Prompt	Response	Comment
REQ	aaa	Request
TYPE	FTC	Type of data block = FTC (Flexible Tones and Cadences)
TABL	0-31	FTC Table number
USER	(NO) YES	Print users of this table and tone table values (tone table value only)
DFLT	0-31	Default to existing FTC tone table
RING	(NO) YES	Change the ringing feature definitions
- NCAD	(1)-255	Normal Cadence
- NBCS		Normal BCS (SL-1 set) ringing
- - TDSH	i bb c tt	TDS Hex (Default is 0032)
- - XTON	0-(2)-255	XCT (NT8D17 Conference/TDS) Tone code
- DCAD	0-(2)-255	Distinctive Cadence
- DBCS		Distinctive BCS (SL-1 set) ringing
- - TDSH	i bb c tt	TDS Hex (Default is 0082)
- - XTON	0-(2)-255	XCT (NT8D17 Conference/TDS) Tone code
- ICAD	0-(5)-255	Intercom Cadence
- IBCS		Intercom ringing for BCS (SL-1)sets
- - TDSH	i bb c tt	TDS Hex (Default is 0012)
- - XTON	0-(2)-255	XCT (NT8D17 Conference/TDS) Tone code
- NDR1 PBX	0-255	Network Distinctive Ring 1 cadence for PBX sets
- NDR1 BCS		Network Distinctive Ring 1 for BCS (SL-1) sets
- - TDSH	i bb c tt	TDS Hex (Internal/External, burst, cadence and tone)
- - XTON	0-255	XCT (NT8D17 Conference/TDS) Tone code

- NDR2 PBX	0-255	Network Distinctive Ring 2 cadence for PBX sets
- NDR2 BCS		Network Distinctive Ring 2 for BCS (SL-1) sets
- - TDSH	i bb c tt	TDS Hex (Internal/External, burst, cadence and tone)
- - XTON	0-255	XCT (NT8D17 Conference/TDS) Tone code
- NDR3 PBX	0-255	Network Distinctive Ring 3 cadence for PBX sets
- NDR3 BCS		Network Distinctive Ring 3 for BCS (SL-1) sets
- - TDSH	i bb c tt	TDS Hex (Internal/External, burst, cadence and tone)
- - XTON	0-255	XCT (NT8D17 Conference/TDS) Tone code
- NDR4 PBX	0-255	Network Distinctive Ring 4 cadence for PBX sets
- NDR4 BCS		Network Distinctive Ring 4 for BCS (SL-1) sets
- - TDSH	i bb c tt	TDS Hex (Internal/External, burst, cadence and tone)
- - XTON	0-255	XCT (NT8D17 Conference/TDS) Tone code
- RCAD	0-(1)-255	Recall Cadence
- RBCS		Recall for BCS (SL-1) sets
- - TDSH	i bb c tt	TDS Hex (Default is 0032)
- - XTON	0-(2)-255	XCT (NT8D17 Conference/TDS) Tone code
- GCAD	0-(1)-255	Group Call Cadence
- GBCS		Group Call for BCS (SL-1) sets
- - TDSH	i bb c tt	TDS Hex (Default is 0082)
- - XTON	0-(2)-255	XCT (NT8D17 Conference/TDS) Tone code
- HCAD	0-(1)-255	Held call reminder Cadence
- HBCS		Held call reminder ringing for BCS (SL-1) sets
- - TDSH	i bb c tt	TDS Hex(Default is 0082)
- - XTON	0-(2)-255	XCT (NT8D17 Conference/TDS) Tone code
- PCAD	0-255	Recall or Misoperation Cadence
- PBCS		Recall or Misoperation ringing for BCS
- - TDSH	i bb c tt	TDS Hex (Default is 0032)
- - XTON	0-(4)-255	XCT (NT8D17 Conference/TDS) Tone code
HCCT	(NO) YES	Hardware Controlled Cadences and Tones

- DIAL		Dial tone
- EEST		End-to-End Signaling Feedback Tone
-- TDSH	i bb c tt	TDS Hex (Default is 0004)
-- XTON	0-(4)-255	XCT (NT8D17 Conference/TDS) Tone code
		For EEST, with X11 Release 19 and later, this value is set to 0 no matter what is entered.
-- XCAD	(0)-55	XCT (NT8D17 Conference/TDS) Cadence number (FCAD cadence number)
- CFWT		Conference Warning Tone
-- XTON	0-(3)-255	Conference Warning Tone number. A tone number provided by the tone circuit.
-- XCAD	0-(19)-255	Conference Warning Tone cadence number. The cadence number should be set up under FCAD.
- SPCL		Special dial tone
-- TDSH	0 00 0 tt	TDS Hex (Default is 0004)
-- XTON	0-(4)-255	XCT (NT8D17 Conference/TDS) Tone code
-- XCAD	(0)-255	XCT (NT8D17 Conference/TDS) Cadence number (FCAD Cadence number)
- CDT		Control Dial Tone
-- TDSH	i bb c tt	TDS Hex (Default is 0004)
-- XTON	0-(4)-255	XCT (NT8D17 Conference/TDS) Tone code
-- XCAD	(0)-255	XCT (NT8D17 Conference/TDS) Cadence number
- CFDT		Call Forward Dial Tone
-- TDSH	i bb c tt	TDS Hex (Default is 0004)
-- XTON	0-(4)-255	XCT (NT8D17 Conference/TDS) Tone code
-- XCAD	(0)-255	XCT (NT8D17 Conference/TDS)
- MWDT		Message Waiting Dial Tone
-- TDSH	i bb c tt	TDS Hex (Default is 0024)
-- XTON	0-(4)-255	XCT (NT8D17 Conference/TDS) Tone code
-- XCAD	0-(17)-255	XCT (NT8D17 Conference/TDS) Cadence number

- CFMW		Call Forward Message Waiting tone
- - TDSH	i bb c tt	TDS Hex (Default is 0024)
- - XTON	0-(4)-255	XCT (NT8D17 Conference/TDS) Tone code
- - XCAD	0-(17)-255	XCT (NT8D17 Conference/TDS) Cadence number
- ACTN		Active feature Dial Tone
- - TDSH	i bb c tt	TDS Hex (Default is special dial tone)
- - XTON	0-(4)-255	XCT (NT8D17 Conference/TDS) Tone code
- - XCAD	(0)-255	XCT (NT8D17 Conference/TDS) Cadence number
- BUSY		Busy tone
- - TDSH	i bb c tt	TDS Hex (Default is 0017)
- - XTON	0-(7)-255	XCT (NT8D17 Conference/TDS) Tone code
- - XCAD	0-(16)-255	XCT (NT8D17 Conference/TDS) Cadence number
- RGBK		Ringback tone
- - TDSH	i bb c tt	TDS Hex (Default is 0035)
- - XTON	0-(5)-255	XCT (NT8D17 Conference/TDS) Tone code
- - XCAD	0-(1)-255	XCT (NT8D17 Conference/TDS) Cadence number
- PREM		Preemption tone
- - TDSH	i bb c tt	TDS Hex (Default is 0006)
- - XTON	0-(6)-255	XCT (NT8D17 Conference/TDS) Tone code
- - XCAD	(0)-255	XCT (NT8D17 Conference/TDS) Cadence number
- PRBK		Precedence Ringback tone
- - TDSH	i bb c tt	TDS Hex (Default is 0008D)
- - XTON	0-(11)-255	XCT (NT8D17 Conference/TDS) Tone code
- - XCAD	0-(2)-255	XCT (NT8D17 Conference/TDS) Cadence number
- ARBK		ACD RGA (Ring Again) Ringback tone
- - TDSH	i bb c tt	TDS Hex (Default is 0008D)
- - XTON	0-(11)-255	XCT (NT8D17 Conference/TDS) Tone code
- - XCAD	0-(2)-255	XCT (NT8D17 Conference/TDS) Cadence number

- FFCT		Flexible Feature Code Confirmation Tone
- - TDSH	i bb c tt	TDS Hex (Default is 0004)
- - XTON	0-(4)-255	XCT (NT8D17 Conference/TDS) tone code
- - XCAD	(0)-255	XCT (NT8D17 Conference/TDS) Cadence number
- LIMT		Log In Mode Tone for 500/2500 ACD sets
- - TDSH	i bb c tt	TDS Hex (Internal/External, burst, cadence and tone)
- - XTON	0-255	XCT (NT8D17 Conference/TDS) Tone code
- - XCAD	0-255	XCT (NT8D17 Conference/TDS) Cadence number
- NRMT		Not Ready (NRDY) Mode Tone for ACD sets
- - TDSH	i bb c tt	TDS Hex (Internal/External, burst, cadence and tone)
- - XTON	0-255	XCT (NT8D17 Conference/TDS) Tone code
- - XCAD	0-255	XCT (NT8D17 Conference/TDS) Cadence number
- AWUT		Automatic Wake Up special error Tone
- - TDSH	i bb c tt	TDS Hex (Default is 0027)
- - XTON	0-(4)-255	XCT (NT8D17 Conference/TDS) Tone code
- - XCAD	(0)-255	XCT (NT8D17 Conference/TDS) Cadence number
- OVFL		Overflow tone
- - TDSH	i bb c tt	TDS Hex (Default is 0027)
- - XTON	0-(7)-255	XCT (NT8D17 Conference/TDS) Tone code
- - XCAD	0-(17)-255	XCT (NT8D17 Conference/TDS) Cadence number
- TEST		Test tone
- - TDSH	0 0 0 tt	TDS Hex (Default is 0008)
- - XTON	0-(8)-255	XCT (NT8D17 Conference/TDS) Tone code
- - XCAD	(0)-255	XCT (NT8D17 Conference/TDS) Cadence number
- HOWL		Howler tone
- - TDSH	i bb c tt	TDS Hex (Default is Overflow tone)
- - XTON	0-255	XCT (NT8D17 Conference/TDS) Tone code
- - XCAD	0-255	XCT (NT8D17 Conference/TDS) Cadence number

LD 56

- ERWT		Expensive Route Warning Tone
- - TDSH	0 0 0 tt	TDS Hex (Default is 0003)
- - XTON	0-(3)-255	XCT (NT8D17 Conference/TDS) Tone code
- - XCAD	(0)-255	XCT (NT8D17 Conference/TDS) Cadence number
- PCWT		Precedence Call Waiting Tone
- - TDSH	0 0 0 tt	TDS Hex (Default is 0003)
- - XTON	0-(3)-255	XCT (NT8D17 Conference/TDS) Tone code
- - XCAD	(0)-255	XCT (NT8D17 Conference/TDS) Cadence number (FCAD Cadence number)
- ACFT		ACD Call Force Tone
- - TDSH	0 0 0 tt	TDS Hex (Default is 0003)
- - XTON	0-(3)-255	XCT (NT8D17 Conference/TDS) Tone code
- - XCAD	(0)-255	XCT (NT8D17 Conference/TDS) Cadence number
- TLP		Tone to Last Party
- - TDSH	i bb c tt	TDS Hex (Default is 0003)
- - XTON	(0)-255	XCT (NT8D17 Conference/TDS) Tone code
- - XCAD	(0)-255	XCT (NT8D17 Conference/TDS) Cadence number
- TLPT	(0)-30	Tone to Last Party Timer in seconds. No tone = 0
- PATI		Patience tone Multi-Party Operations
- - TDSH	i bb c tt	TDS Hex (Default is 0000)
- - XTON	(0)-255	XCT (NT8D17 Conference/TDS) Tone code
- - XCAD	(0)-255	XCT (NT8D17 Conference/TDS) Cadence number
CAB	(NO) YES	M911 Call Abandon on Answer tone
- TDSH	i bb cc tt	TDS external, burst, cadence and tone
- XTON	0-255	NT8D17 TDS Tone code
- XCAD	0-255	NT8D17 Cadence code for FCAD
CAST	(NO) YES	Centralized Attendant Service Tones
- LDN		Listed Directory Number tone
- - TDSH	i bb c tt	TDS Hex (Default is 0346)
- - XTON	(0)-255	XCT (NT8D17 Conference/TDS) Tone code

-- XCAD	0-(24)-255	XCT (NT8D17 Conference/TDS) Cadence number
-- CDNC	0-(16)-255	MCAD software Cadence number
- DIO		Dial 0 Recall tone
-- TDSH	i bb c tt	TDS Hex (Default is 0283)
-- XTON	0-(3)-255	XCT (NT8D17 Conference/TDS) Tone code
-- XCAD	0-(22)-255	XCT (NT8D17 Conference/TDS) Cadence number
-- CDNC	0-(16)-255	MCAD software Cadence number
- HLDC		Hold Confirmation tone
-- TDSH	i bb c tt	TDS Hex (Default is 0346)
-- XTON	(0)-255	XCT (NT8D17 Conference/TDS) Tone code
-- XCAD	0-(24)-255	XCT (NT8D17 Conference/TDS) Cadence number
-- CDNC	0-(16)-255	MCAD software Cadence number
- CPNC		Camp-On Confirmation tone
-- TDSH	i bb c tt	TDS Hex (Default is 0243)
-- XTON	0-(3)-255	XCT (NT8D17 Conference/TDS) Tone code
-- XCAD	0-(21)-255	XCT (NT8D17 Conference/TDS) Cadence number
-- CDNC	0-(17)-255	MCAD software Cadence number
SCCT	(NO) YES	Software Controlled Cadences and Tones
ILIN		NSCC pending agent Login tone
ILOU		NSCC pending agent Logout tone
- CAMP		Camp-On tone
-- TDSH	i bb c tt	TDS Hex (Default is 0003)
-- XTON	0-(3)-255	XCT (NT8D17 Conference/TDS) Tone code
-- XCAD	(0)-255	XCT (NT8D17 Conference/TDS) Cadence number
-- CDNC	0-(17)-255	MCAD software cadence number
- RPAW	x xx xx xx	Radio Paging Warning tone
-- CLN	1-31	Cadence Length
-- TDSH	i bb c tt	TDS Hex (Default is 0003)
-- XTON	0-(3)-255	XCT (NT8D17 Conference/TDS) Tone code

-- XCAD	(0)-255	XCT (NT8D17 Conference/TDS) Cadence number
-- CDNC	0-(19)-255	MCAD software cadence number
- AOBT		Agent Observe Tone
-- TDSH	i bb c tt	TDS Hex (Default is 0003)
-- XTON	0-(3)-255	XCT (NT8D17 Conference/TDS) Tone code
-- XCAD	(0)-255	XCT (NT8D17 Conference/TDS) Cadence number
-- CDNC	0-(18)-255	MCAD software cadence number
- INTU		Intrusion tone (If Option 11, see note on 694.)
-- TDSH	i bb c tt	TDS Hex (Default is 0003)
-- XTON	0-(3)-255	XCT (NT8D17 Conference/TDS) Tone code
-- XCAD	(0)-255	XCT (NT8D17 Conference/TDS) Cadence number
-- CDNC	0-(19)-255	MCAD software cadence number
- CWT		Call Waiting Tone
-- TDSH	i bb c tt	TDS Hex (Default is 0003)
-- XTON	0-(3)-255	XCT (NT8D17 Conference/TDS) Tone code
-- XCAD	(0)-255	XCT (NT8D17 Conference/TDS) Cadence number
-- CDNC	0-(20)-255	MCAD software cadence number
- OBKT		Observe Blocking Tone
-- TDSH	i bb c tt	TDS Hex (Default is 0003)
-- XTON	0-(3)-255	XCT (NT8D17 Conference/TDS) Tone code
-- XCAD	(0)-255	XCT (NT8D17 Conference/TDS) Cadence number
-- CDNC	0-(17)-255	MCAD software cadence number
- OVRD		Override tone
-- TDSH	i bb c tt	TDS Hex (Default is 0003)
-- XTON	0-(3)-255	XCT (NT8D17 Conference/TDS) Tone code
-- XCAD	(0)-255	XCT (NT8D17 Conference/TDS) Cadence number
-- CDNC	0-(18)-255	MCAD software cadence number
- OHQ		Off-Hook Queuing tone
-- TDSH	i bb c tt	TDS Hex (Default is 0003)
-- XTON	0-(3)-255	XCT (NT8D17 Conference/TDS) Tone code

- - XCAD	(0)-255	XCT (NT8D17 Conference/TDS) Cadence number
- - CDNC	0-(3)-255	MCAD software cadence number
- SRT		Set Relocation Tone
- - TDSH	i bb c tt	TDS Hex (Default is 0003)
- - XTON	0-(3)-255	XCT (NT8D17 Conference/TDS) Tone code
- - XCAD	(0)-255	XCT (NT8D17 Conference/TDS) Cadence number
- - CDNC	0-(22)-255	MCAD software cadence number
- TMAT		Telephone Messaging Alert Tone
- - TDSH	i bb c tt	TDS Hex (Default is 0003)
- - XTON	0-(3)-255	XCT (NT8D17 Conference/TDS) Tone code
- - XCAD	(0)-255	XCT (NT8D17 Conference/TDS) Cadence number
- - CDNC	0-(22)-255	MCAD software cadence number
- TMOT		Telephone Messaging OK Tone
- - TDSH	i bb c tt	TDS Hex (Default is 0003)
- - XTON	0-(3)-255	XCT (NT8D17 Conference/TDS) Tone code
- - XCAD	(0)-255	XCT (NT8D17 Conference/TDS) Cadence number
- - CDNC	0-(23)-255	MCAD software cadence number
- TSUT		Telephone Status Update Tone
- - TDSH	i bb c tt	TDS Hex (Default is 0003)
- - XTON	0-(3)-255	XCT (NT8D17 Conference/TDS) Tone code
- - XCAD	(0)-255	XCT (NT8D17 Conference/TDS) Cadence number
- - CDNC	0-(23)-255	MCAD software cadence number
SRC	(NO) YES	Source
- SRC1		Source tone 1
- - TDSH	i bb c tt	TDS Hex (Default is 0000)
- - XTON	(0)-255	XCT (NT8D17 Conference/TDS) Tone code
- - XCAD	(0)-255	XCT (NT8D17 Conference/TDS) Cadence number
- SRC2		Source tone 2
- SRC3		Source tone 3
- SRC4		Source tone 4

LD 56

- SRC5		Source tone 5
- SRC6		Source tone 6
- SRC7		Source tone 7
- SRC8		Source tone 8
MINT	(NO) YES	Allow tones or announcements
- CFSN	0-255 0-255	Call Forward All Calls active
- - TDSH	i bb c tt	Third parameter
- CPOQ	0-255 0-255	Call is being parked or set is in Off-Hook Queuing state
- - TDSH	i bb c tt	Third parameter
- RGAR	0-255 0-255	Ring Again is applied by another set
- - TDSH	i bb c tt	Third parameter
- RPCT	0-255 0-255	Confirmation Tone replaced by an announcement
- - TDSH	i bb c tt	Third parameter
- RGAB	0-255 0-255	Station Dialed Busy
- - TDSH	i bb c tt	Third parameter
- MWAN	0-255 0-255	Message Waiting
- - TDSH	i bb c tt	Third parameter
- DNDA	0-255 0-255	Do Not Disturb
- - TDSH	i bb c tt	Third parameter
- SSLK	0-255 0-255	Set Status Lockout
- - TDSH	i bb c tt	Third parameter
PULS	(NO) YES	Pulse timers are to be changed
- P10	4 (8)	Codes for make/break ratio for 10 pps
- ID1	256-(768)-1024	Inter-Digit 1
- ID2	256-(512)-1024	Inter-Digit 2
- IDD	256-1024	Inter-Digit DTMF
- IDE	256-(384)	EOS interdigital pause in milliseconds
RVDL	(0) x	Reverse Dial format

MCAD: Master cadence data block

Prompt	Response	Comment
REQ	aaa	Request
TYPE	MCAD	Type of data block = MCAD (Master cadence)
WACD	0-225	Cadence Number (0 is reserved for continuous tone and cannot be changed)
CDNC	xxxx xxxx ... xxxx	Cadence

RART: Route Access Restriction table data block

Prompt	Response	Comment
REQ	CHG	Request. REQ = NEW or OUT is not accepted for RART.
TYPE	RART	Type of data block = RART (Route Access Restriction table)
CUST	(0)-xx	Customer number
ROUT	(0)-127	Route
ART	1-63	Access Restriction Table

RCDT: Route Category Default Table data block

Prompt	Response	Comment
REQ	CHG	Request. When TYPE = RCDT, you cannot enter NEW or OUT at the REQ prompt.
TYPE	RCDT	Type of data block = RCDT (Route Category Default table)
COT	(0)-63	COT, FEX, WAT. These route types will be assigned the entered ART when the route is created in LD16.
DID	(0)-63	These route types will be assigned the entered ART when the route is created in LD16
TIE	(0)-63	CAA, CAM, CSA, TIE
OTH	(0)-63	Other

TBAR: Trunk Barring data block

Prompt	Response	Comment
REQ	NEW CHG	Request
TYPE	TBAR	Type of data block = TBAR (Trunk Barring)
ART	1-63	Access Restriction Table
DENY	yyy yyy ...	Enter ART number denied to Originating Trunk Connection (OTC)

Print a customer defined route's ART course

Prompt	Response	Comment
REQ	PRT	Request
TYPE	aaa	Type of data block
CUST	(0)-xx	Customer number
ROUT	(0)-127	Route

Default Master Cadence (MCAD) tables

WCAD = DEFAULT MCAD TABLE (Master Cadence Table)

000	CDNC = 0000 0000 0000 0000 0000 0000 0000 0000 0000 0000
001	CDNC = 0410 0800 0000 0000 0000 0000 0000 0000 0000 0000
002	CDNC = 0308 0076 0308 0076 0000 0000 0000 0000 0000 0000
003	CDNC = 0205 0000 0000 0000 0000 0000 0000 0000 0000 0000
004	CDNC = 0102 0102 0205 0819 0000 0000 0000 0000 0000 0000
005	CDNC = 0100 0100 0000 0000 0000 0000 0000 0000 0000 0000
016	CDNC = 0128 0000 0000 0000 0000 0000 0000 0000 0000 0000
017	CDNC = 0051 0000 0000 0000 0000 0000 0000 0000 0000 0000
018	CDNC = 0205 3072 0051 3072 0000 0000 0000 0000 0000 0000
019	CDNC = 0205 1229 0051 1229 0000 0000 0000 0000 0000 0000
020	CDNC = 0051 0026 0051 2048 0000 0000 0000 0000 0000 0000
021	CDNC = 0410 0000 0000 0000 0000 0000 0000 0000 0000 0000
022	CDNC = 0102 0000 0000 0000 0000 0000 0000 0000 0000 0000
023	CDNC = 0512 0000 0000 0000 0000 0000 0000 0000 0000 0000

Master Cadence (MCAD) table for Japan

001	CDNC = 0050 0050 0050 0450 0000 0000 0000 0000 0000 0000
002	CDNC = 0200 0400 0000 0000 0000 0000 0000 0000 0000 0000

Default Firmware Cadence (FCAD) tables

WCAD = DEFAULT FCAD TABLE (Firmware Cadence Table)	
000	Cadence number in the Master Cadence table (MCAD) CDNC = 0000 0000 0000 0000 0000 0000 0000 0000 0000 0000 END = OFF SPCL = NO
001	Cadence number in the Master Cadence table (MCAD) CDNC = 0410 0800 0000 0000 0000 0000 0000 0000 0000 0000 END = REPT CYCS = 1 SPCL = NO
002	Cadence number in the Master Cadence table (MCAD) CDNC = 0308 0076 0308 0076 0000 0000 0000 0000 0000 0000 END = REPT CYCS = 1 2 SPCL = NO
003	Cadence number in the Master Cadence table (MCAD) CDNC = 0205 0000 0000 0000 0000 0000 0000 0000 0000 0000 END = OFF SPCL = NO
004	Cadence number in the Master Cadence table (MCAD) CDNC = 0102 0102 0205 0819 0000 0000 0000 0000 0000 0000 END = REPT CYCS = 1 2 SPCL = NO
005	Cadence number in the Master Cadence table (MCAD) CDNC = 0100 0100 0000 0000 0000 0000 0000 0000 0000 0000 END = REPT CYCS = 1 SPCL = NO
(Part 1 of 3)	

WCAD = DEFAULT FCAD TABLE (Firmware Cadence Table)	
016	Cadence number in the Master Cadence table (MCAD) CDNC = 0100 0100 0000 0000 0000 0000 0000 0000 0000 0000 END = REPT CYCS = 1 SPCL = NO
017	Cadence number in the Master Cadence table (MCAD) CDNC = 0050 0050 0000 0000 0000 0000 0000 0000 0000 0000 END = REPT CYCS = 1 SPCL = NO
018	Cadence number in the Master Cadence table (MCAD) CDNC = 0010 0010 0000 0000 0000 0000 0000 0000 0000 0000 END = REPT CYCS = 1 SPCL = NO
019	Cadence number in the Master Cadence table (MCAD) CDNC = 0040 0060 0000 0000 0000 0000 0000 0000 0000 0000 END = REPT CYCS = 1 SPCL = NO
020	Cadence number in the Master Cadence table (MCAD) CDNC = 0015 0000 0000 0000 0000 0000 0000 0000 0000 0000 END = OFF SPCL = NO
021	Cadence number in the Master Cadence table (MCAD) CDNC = 0020 0000 0000 0000 0000 0000 0000 0000 0000 0000 END = OFF SPCL = NO
022	Cadence number in the Master Cadence table (MCAD) CDNC = 0020 0020 0020 0000 0000 0000 0000 0000 0000 0000 END = OFF SPCL = NO
(Part 2 of 3)	

WCAD =	DEFAULT FCAD TABLE (Firmware Cadence Table)
023	Cadence number in the Master Cadence table (MCAD) CDNC = 0060 0000 0000 0000 0000 0000 0000 0000 0000 0000 END = OFF SPCL = NO
024	Cadence number in the Master Cadence table (MCAD) CDNC = 0020 0000 0020 0000 0020 0000 0000 0000 0000 0000 END = OFF SPCL = YES
025	Cadence number in the Master Cadence table (MCAD) CDNC = 0200 0000 0000 0000 0000 0000 0000 0000 0000 0000 END = OFF SPCL = NO
026	Cadence number in the Master Cadence table (MCAD) CDNC = 0050 0000 0000 0000 0000 0000 0000 0000 0000 0000 END = OFF SPCL = NO
027	Cadence number in the Master Cadence table (MCAD) CDNC = 0400 0000 0000 0000 0000 0000 0000 0000 0000 0000 END = OFF SPCL = NO
028	Cadence number in the Master Cadence table (MCAD) CDNC = 0125 0000 0000 0000 0000 0000 0000 0000 0000 0000 END = OFF SPCL = NO
029	Cadence number in the Master Cadence table (MCAD) CDNC = 0030 0070 0000 0000 0000 0000 0000 0000 0000 0000 END = REPT CYCS = 1 SPCL = NO
(Part 3 of 3)	

Firmware Cadence (FCAD) table for Japan

WCAD =	DEFAULT FCAD TABLE (Cadence Table for JAPAN TDS)
001	Cadence number in the Master Cadence table (MCAD) CDNC = 0200 0400 0000 0000 0000 0000 0000 0000 0000 0000 END = REPT CYCS = 1 2 SPCL = NO
002	Cadence number in the Master Cadence table (MCAD) CDNC = 0050 0050 0050 0450 0000 0000 0000 0000 0000 0000 END = REPT CYCS = 1 SPCL = NO
017	Cadence number in the Master Cadence table (MCAD) CDNC = 0100 0050 0000 0000 0000 0000 0000 0000 0000 0000 END = REPT CYCS = 1

Alphabetical list of prompts

Prompt	Response	Comment	Pack/Rel
ACFT		ACD Call Force Tone When defining the hex codes for this tone, only the code for the frequency/level is required as the cadence is provided by software. Enter zero for the other values (e.g., TDSH = 0 0 0 xx, XTON = xxx, XCAD = 000).	ftc-13
ACNO	1-4 <cr>	Access Code Number Outgoing Access Code to be used (4 codes per table) Go to DGTS prompt (REQ = CHG)	ftc-12
ACTN		Active feature dial tone	ftc-12
AOBT		Agent Observe Tone This cadence repeats the last 8 on/off phases to allow for a special tone burst on the first cycle. For example, a cadence is defined as 3 s on, 3 s off, 1 s on, 3 s off. After the initial burst, the tone repeats in a 1 s on, 3 s off pattern. In order to repeat the initial 3 s burst, it must be entered as the first and last cycle because the first cycle is not repeated. In this case the cadence is defined as: 3 s on, 3 s off, 1 s on, 3 s off, 3 s on 3 s off.	ftc-13
ARBK		ACD RGA (Ring Again) Ringback tone	ftc-13
ART	1-63 <cr>	Access Restriction Table Return to REQ prompt ART remains unchanged Printing of the route category default table occurs	ftc-10
AWUT		Automatic Wake Up special error Tone	mlwu-16
BUSY		Busy tone	ftc-13
CAB	(NO) YES	M911 Call Abandon on Answer tone	M911-19
CAMP		Camp-On tone	ftc-13

Prompt	Response	Comment	Pack/Rel
CAST	(NO)YES	Centralized Attendant Service Tones Modification to the CAS (Centralized Attendant Service) tone definition. For systems with XCT (NT8D17 Conference/TDS) cards, each feature requires a firmware cadence (XCAD), a software cadence (CNDN) and tone (XTON). Due to the finer resolution of the firmware cadence (5 ms) compared to the software (96/128 ms), you should allow the software cadence to be long enough to cover the full duration of the XCAD. For example, to define a cadence of 0.1 s on, 0.1 s off, 0.1 s on, steady off • CDNC0020 0020 0020 0000 • END OFF • SPCL The software cadence is then 0.3 s (600 ms). If the software precision is 128 ms, the software cadence is calculated as follows: • $600 \text{ ms}/128 = 4.6 = 5$ (rounded up) • $128 \times 5 = 640$ Entry to on phase = $640/5 = 0128$, and to define the cadence enter 0128 to prompt CDNC.	ftc-13
CDNC	xxxx xxxx ... xxxx	On-off phases for Cadence (ten on-off cycles) Entries 1 through 15 are reserved for ringing cadences. When defining the cadences in MCAD each phase entry is in 5 millisecond increments. The range for the first phase is 1-9999 increments. The range for the second phase is 0-9999 increments. The default is 0 0 0 0 0 0 0 0 0 0. Table shows the default MCAD Tables.	ftc-14
	0-(16)-255	MCAD software cadence number	ftc-14
	0-(17)-255	MCAD software cadence number	
	0-(19)-255	MCAD software cadence number (see <i>Note 5</i>)	

LD 56

Page 716 of 1004 Alphabetical list of prompts

Prompt	Response	Comment	Pack/Rel
	0-(18)-255	MCAD software cadence number (see <i>Note 5</i>)	
	0-(20)-255	MCAD software cadence number	
	0-(3)-255	MCAD software cadence number	
	0-(22)-255	MCAD software cadence number	
	0-(23)-255	MCAD software cadence number	
CDT		Control Dial Tone	ftc-13
CFDT		Call Forward Dial Tone	ftc-13
CFMW		Call Forward Message Waiting tone	ftc-13
CFWT		Conference Warning Tone (applies only to Option 11E)	basic-21
CFSN	0-255 0-255	Call Forward All Calls active First parameter is the MCAD table cadence entry number. Second parameter is the XCT tone code.	ftc-15
CLN	1-31	Cadence Length (length of the Camp-On tone burst in 96 or 128 millisecond increments) See TMRK prompt in LD17.	ftc-9
CNT	(0)-15	Count Number of digits outputted before dial tone detector reconnection (0 specifies that digit counting is not to be used).	ftc-12
COT	(0)-63	COT, FEX, WAT. These route types will be assigned the entered ART when the route is created in LD 16.	
CPNC		Camp-On Confirmation tone	ftc-13
CPOQ	0-255 0-255	Call is being Parked or set is in Off-Hook Queuing state. First parameter is the MCAD table cadence entry number. Second parameter is the XCT tone code.	ftc-15
CUST	(0)-xx	Customer number	cust-15

Prompt	Response	Comment	Pack/Rel
CWT		Call Waiting Tone	ftc-13
CYCS	x x x x	On-off Cycles (1 to 5) to be repeated. Default is no repeats. Prompted when END = REPT	ftc-14
DBCS		Distinctive BCS (SL-1 set) ringing	ftc-13
DCAD	0-(2)-255	Distinctive Cadence 500/2500 and Digital set ringing MCAD cadence number. (See <i>Notes</i> 1 and 3) It is recommended that the cadence used matches the cadence provided for SL-1 sets (prompt DBCS). DCAD is also used for SL-1 sets in systems with XCT (NT8D17 Conference/TDS) cards.	ftc-13
DDGT	xxxxx X <cr>	Dialed digits (1-5 digits) To remove To end	pnp-15
DENY	yyy yyy ... ALL xALL Xyyy Xyyy .. <cr>	Enter ART number denied to Originating Trunk Connection (OTC) Deny all ARTs to OTC All ART numbers are allowed to OTC Enter ART numbers allowed to OTC Return to REQ prompt with no table being stored The ART is removed unless it is used as a default when REQ = OUT. REQ = NEW or OUT is disallowed for RART.	ftc-10
DFLT	0-31 <cr>	Default to existing FTC tone table Create tone table without defaulting Prompted when REQ = NEW	ftc-13
DGTS	xxxx Xxxxx <cr>	Digits The system will wait for dial tone after these additional (1-4) digits. Remove digit sequence from table Return to REQ prompt DGTS prompt will repeat until <cr> is pressed.	ftc-12

LD 56

Page 718 of 1004 Alphabetical list of prompts

Prompt	Response	Comment	Pack/Rel
DI0		Dial 0 recall tone	ftc-13
DIAL		Dial tone	ftc-13
DID	(0)-63	These route types will be assigned the entered ART when the route is created in LD 16	
DNDA	0-255 0-255	Do Not Disturb First parameter is the MCAD table cadence entry number. Second parameter is the XCT tone code.	ftc-15
DTPn	(YES) NO	Dial Tone Post-dial Dial tone detector is to be reconnected immediately after Outgoing Access (OACn).	ftc-12
EEST		End-to-End Signaling feedback Tone This prompt appears with X11 Release 19 and later, to indicate that the improved EES tone is used. There is actually no cadence. When using the Enhanced Conference/TDS card, the XCAD prompt is not printed, and the cadence is set to 0 no matter what is entered.	ees-19
END	REPT ON OFF	End treatment for cadence Repeating cycles (defined by the CYCS prompt) End cadence on the "on" phase End cadence on the "off" phase	ftc-14
ERWT		Expensive Route Warning Tone When defining the hex codes for this tone, only the code for the frequency/level is required as the cadence is provided by software. Enter zero for the other values (e.g., TDSH = 0 0 0 xx, XTON = xxx, XCAD = 000).	ftc-13

Prompt	Response	Comment	Pack/Rel
FFCT		Flexible Feature Code Confirmation Tone This tone allows users of 500/2500 or multi-line telephone sets to receive a confirmation tone after activating/deactivating the following features: • Call Forward activate/deactivate • Ring Again deactivate • Store/erase Stored Number Redial • all Automatic Wake Up codes • Speed Call store • any verification code	ffc-15
GBCS		Group Call ringing for BCS (SL-1) sets	grp-13
GCAD	0-(1)-255	Group Call Cadence 500/2500 and Digital set Group Call Ringing Cadence MCAD cadence number It is recommended that the cadence used matches the cadence provided for SL-1 sets (prompt GBCS). GCAD is also used for SL-1 sets in systems with XCT (NT8D17 Conference/TDS) cards.	grp-14
HBCS		Held call ringing for BCS (SL-1) sets	ftc-13
HCAD	0-(1)-255	Held call reminder Cadence 500/2500 and Digital set held call reminder ringing cadence MCAD cadence number It is recommended that the cadence used matches the cadence provided for SL-1 sets (prompt HBCS). HCAD is also used for SL-1 sets in systems with XCT (NT8D17 Conference/TDS) cards.	ftc-13
HCCT	(NO) YES	Hardware Controlled Cadences and Tones Modification of the hardware (TDS card) controlled cadence tone definitions allowed. For systems with XCT (NT8D17 Conference/TDS) cards, each feature requires a firmware cadence (XCAD) and tone (XTON). For other TDS cards, the tone and cadence is defined by prompt TDSH.	ftc-13
HLDC		Hold Confirmation tone	ftc-13

LD 56

Page 720 of 1004 Alphabetical list of prompts

Prompt	Response	Comment	Pack/Rel
HOWL		Howler tone	ftc-13
IBCS		Intercom ringing for BCS (SL-1)sets Distinctive Dial Intercom ringing for BCS (SL-1) sets	ftc-13
ICAD	0-(5)-255	Intercom Cadence 500/2500 and Digital set Dial Intercom Distinctive ringing MCAD cadence number It is recommended that the cadence used matches the cadence provided for SL-1 sets (prompt IBCS). ICAD is also used for SL-1 sets in systems with XCT (NT8D17 Conference/TDS) cards.	ftc-13
ID1	256-(768)-1024	Inter-Digit 1(P10 interdigit pause in milliseconds)	ftc-13
ID2	256-(512)-1024	Interdigit 2 (P20 interdigit pause in milliseconds)	ftc-13
IDD	256-1024	Interdigit DTMF pause in milliseconds Default is 512 if 100 is the response to prompt DTRB in LD 17. Otherwise, the default is 384.	ftc-13
IDE	256 - (384)	EOS interdigital pause in ms. Prompted if DDD package is equipped and PULS = YES.	ftc-13
ILIN		Nortel Symposium Call Center (NXCC) pending agent Login tone	nxcc-22
ILOU		Nortel Symposium Call Center (NXCC) pending agent Logout tone	nxcc-22

Prompt	Response	Comment	Pack/Rel
INTU		Intrusion tone This cadence repeats the last 8 on/off phases to allow for a special tone burst on the first cycle. For example, a cadence is defined as 3 s on, 3 s off, 1 s on, 3 s off. After the initial burst, the tone repeats in a 1 s on, 3 s off pattern. In order to repeat the initial 3 s burst, it must be entered as the first and last cycle because the first cycle is not repeated. In this case the cadence is defined as: 3 s on, 3 s off, 1 s on, 3 s off, 3 s on 3 s off.	ftc-13
LDN		Listed Directory Number tone	ftc-13
LIMT		Log In Mode Tone for 500/2500 ACD sets This is the tone setting for ACD services to 500/2500 agent sets. You must have Flexible Tones and Cadences (FTC) supported for this feature to function properly.	bacd-16
MINT	(NO) YES	Allow tones or announcements (NO- tone default values)	mint-15
MWAN	0-255 0-255	Message Waiting The first parameter is the MCAD table cadence entry number. The second parameter is the XCT tone code.	ftc-15
MWDT		Message Waiting Dial Tone	ftc-13
NBCS		Normal BCS (SL-1 set) ringing	ftc-13
NCAD	(1)-255	Normal Cadence 500/2500 and Digital set ringing MCAD cadence number. (<i>Notes 1 and 3</i>) It is recommended that the cadence used matches the cadence provided for SL-1 sets (prompt NBCS). NCAD is also used for SL-1 sets in systems with XCT (NT8D17 Conference/TDS) cards.	ftc-13
NDR1 BCS		Network Distinctive Ring 1 for BCS (SL-1) sets	ftc-16

Prompt	Response	Comment	Pack/Rel
NDR1 PBX		Network Distinctive Ring 1 cadence for PBX sets	ftc-16
	0-255	500/2500 and Digital set Network Distinctive Ringing cadence 1 MCAD cadence number. It is recommended that the cadence used matches the cadence provided for SL-1 sets (prompt NDR1 BCS). NDR1 PBX is also used for SL-1 sets in systems with XCT (NT8D17 Conference/TDS) cards.	
NDR2 BCS		Network Distinctive Ring 2 for BCS (SL-1) sets	ftc-16
NDR2 PBX		Network Distinctive Ring 2 cadence for PBX sets	ftc-16
	0-255	500/2500 and Digital set Network Distinctive Ringing cadence 2 MCAD cadence number. It is recommended that the cadence used matches the cadence provided for SL-1 sets (prompt NDR2 BCS). NDR2 PBX is also used for SL-1 sets in systems with XCT (NT8D17 Conference/TDS) cards.	
NDR3 BCS		Network Distinctive Ring 3 for BCS (SL-1) sets	ftc-16
NDR3 PBX		Network Distinctive Ring 3 cadence for PBX sets	ftc-16
	0-255	500/2500 and Digital set Network Distinctive Ringing cadence 3 MCAD cadence number. It is recommended that the cadence used matches the cadence provided for SL-1 sets (prompt NDR3 BCS). NDR3 PBX is also used for SL-1 sets in systems with XCT (NT8D17 Conference/TDS) cards.	
NDR4 BCS		Network Distinctive Ring 4 for BCS (SL-1) sets	ftc-16
NDR4 PBX		Network Distinctive Ring 4 cadence for PBX sets	ftc-16
	0-255	500/2500 and Digital set Network Distinctive Ringing cadence 4 MCAD cadence number It is recommended that the cadence used matches the cadence provided for SL-1 sets (prompt NDR4 BCS). NDR4 PBX is also used for SL-1 sets in systems with XCT (NT8D17 Conference/TDS) cards.	

Prompt	Response	Comment	Pack/Rel
NRMT		Not Ready (NRDY) Mode Tone for ACD sets This is the tone setting for the NRDY function within ACD services to 500/2500 agent sets. You must have Flexible Tones and Cadences supported for this feature to function properly.	bacd-16
OACn	xxxx Xxxxx	Outgoing Access Code (1-4 digits) Where: n = ACNO response Remove OACn	ftc-12
OBKT		Observe Blocking Tone	ftc-13
OHQ		Off-Hook Queuing tone	ftc-13
OTH	(0)-63 <cr>	Other (ADM, DIC, MDM, PAG, RCD) These route types will be assigned the entered ART when the route is created in LD 16. Return to REQ prompt.	ftc-10
OVFL		Overflow tone	ftc-13
OVRD		Override tone This cadence repeats the last 8 on/off phases to allow for a special tone burst on the first cycle. For example, a cadence is defined as 3 s on, 3 s off, 1 s on, 3 s off. After the initial burst, the tone repeats in a 1 s on, 3 s off pattern. In order to repeat the initial 3 s burst, it must be entered as the first and last cycle because the first cycle is not repeated. In this case the cadence is defined as: 3 s on, 3 s off, 1 s on, 3 s off, 3 s on 3 s off.	ftc-13
P10	4 (8)	Codes for make/break ratio for 10 pps. Other make/break ratio (Prompt S10P in LD97) North American make/break ratio (Prompt S10P in LD97) (See also CLS P10 in LD 14)	ftc-13
PATI		Patience tone multi-party operations	frta-21
PBCS		Recall or Misoperation ringing for BCS (SL-1) sets (default is SL-1 ringing tone TDS code)	ftc-12

LD 56

Prompt	Response	Comment	Pack/Rel
PCAD	0-255	Recall or Misoperation Cadence 500/2500 and Digital set Recall or Misoperation ringing cadence MCAD cadence number It is recommended that the cadence used matches the cadence provided for SL-1 sets (prompt PBCS). PCAD is also used for SL-1 sets in systems with XCT (NT8D17 Conference/TDS) cards.	ftc-12
PCWT		Precedence Call Waiting Tone When defining the TDS hex codes for this tone, only the code for the frequency/level is required as the cadence is provided by software. Enter zero for the other values (e.g., 0 0 0 xx).	ftc-13
PRBK		Precedence Ringback tone	ftc-13
PREM		Preemption tone	ftc-13
PULS	(NO) YES	Pulse timers are to be changed	ftc-13
RBCS		Call Park Recall ringing for BCS (SL-1) sets	ftc-14
RCAD	0-(1)-255	Recall Cadence 500/2500 and digital set Call Park recall ringing cadence MCAD cadence number. RCAD is also used for SL-1 sets in systems with XCT (NT8D17 Conference/TDS) cards.	ftc-14
REQ	CHG END NEW OUT PRT	Request Change existing data block Exit Overlay program Add new data block to the system Remove data block Print data block	ftc-13
RGAB	0-255 0-255	Station Dialed Busy (calling party allowed to apply Ring Again) The first parameter is the MCAD table cadence entry number. The second parameter is the XCT tone code.	ftc-15

Prompt	Response	Comment	Pack/Rel
RGAR	0-255 0-255	Ring Again is applied by another set The first parameter is the MCAD table cadence entry number. The second parameter is the XCT tone code.	ftc-15
RGBK		Ringback tone	ftc-13
RING	(NO) YES	Change the Ringing feature definitions For systems with NT8D17 Conference/TDS cards, all telephones share the same ringing cadence. SL-1 telephones require an NT8D17 tone (XTON).	ftc-13
ROUT	(0)-127 <cr>	Route Print routes with non-zero ART numbers, along with the ART number. Return to REQ prompt. REQ = NEW or OUT is disallowed for RCDT	ftc-10
RPAW	x xx xx xx	Radio Paging Warning tone	ftc-15
RPCT	0-255 0-255	Confirmation Tone Replaced by an announcement The first parameter is the MCAD table cadence entry number. The second parameter is the XCT tone code.	ftc-15
RVDL	(0) 1 2	Reverse Dial format No Reverse Dial format Reverse Dial format 1 Reverse Dial format 2	ftc-10
SCCT	(NO) YES	Software Controlled Cadences and Tones Modification of the Software Controlled Cadence Tone definitions allowed	ftc-13
SPCL		Special dial tone Only the code for the frequency/level is required as the cadence is provided by software. Enter 0 for the other values (e.g., TDSH = 0 0 0 xx, XTON = xxx, XCAD = 000).	ftc-13
SRC	(NO) YES	Source tones (SRC1 through SRC8) are required. Eight intercept Source tones can be defined. These tones are entered in LD 15 in response to the various intercept treatment prompts.	ftc-13

LD 56

Prompt	Response	Comment	Pack/Rel
SRC1		Source tone 1 Prompts and default values for TDSH, XTON and XCAD are the same for all SRC1 through SRC8 prompts.	ftc-13
SRC2		Source tone 2	ftc-13
SRC3		Source tone 3	ftc-13
SRC4		Source tone 4	ftc-13
SRC5		Source tone 5	ftc-13
SRC6		Source tone 6	ftc-13
SRC7		Source tone 7	ftc-13
SRC8		Source tone 8	ftc-13
SRT		Set Relocation Tone	ftc-13
SSLK	0-255 0-255	Set Status Lockout First parameter is the MCAD table cadence entry number. Second parameter is the XCT tone code.	ftc-13
TABL	0-31 <cr>	FTC Table number To associate a FTC table with a trunk route, enter the table number in response to prompt TTBL in LD 16. Prints all tables	ftc-13
TABL	0-31	Table number for Flexible Dial Tone Detection	ftc-13
TDSH	i bb c tt	Hexadecimal code for TDS. Internal/External, burst, cadence and tone (See <i>Note 2</i>) The default value of a TDSH prompt changes according to the tone-type prompt (e.g. NBCS, IBCS, HOWL, etc.) which precedes it.	ftc-14
TEST		Test tone	ftc-13
TIE	(0)-63	CAA, CAM, CSA, TIE These route types will be assigned the entered ART when the route is created in LD16.	

Prompt	Response	Comment	Pack/Rel
TLP		Tone to Last Party	
TLPT	(0)-30	Tone to Last Party Timer in seconds. No tone = 0.	
TMAT		Telephone Messaging Alert Tone	ftc-13
TMOT		Telephone Messaging OK Tone	ftc-13
TONE	(DIAL) SPDT SRC-SRC8	Tone to be provide after the dialed digits. Dial tone Special Dial Tone Source tones 1-8 (Valid if FTC package [125] is equipped)	pn-p-15
TONES	ttt ttt ...	NT8D17 tones (0-255) to be used with each phase of the cadence. Default is no tones (0 0 0 0 0). See "Default Firmware Cadence (FCAD) tables" on page 710.	ftc-14
TSUT		Telephone Status Update Tone	ftc-13
TYPE		Type of data block	ftc-13
	DTAD	Special Dial tone After Dialed number data block	
	FCAD	Firmware Cadence data block	ftc-15
	FDTD	Flexible Dial Tone Detection data block	
	FTC	Flexible Tones and Cadences data block	ftc-13
	MCAD	Master Cadence data block (Release 14 and later)	ftc-14
	RART	Route Access Restriction Table data block REQ = NEW or OUT is disallowed for RART.	
	RCDT	Route Category Default Table data block REQ = NEW or OUT is disallowed for RCDT.	
	TBAR	Trunk Barring data block	
USER	(NO) YES	Print Users of this table and tone table values (tone table value only) Prompted when REQ = PRT	ftc-13

LD 56

Prompt	Response	Comment	Pack/Rel
WCAD	0-225	Cadence number in the Firmware Cadence table (FCAD) Cadence number 0 is reserved for continuous tone and is not changeable.	ftc-14
WTON	(NO) YES	Define tones associated with the cadence. Prompted for systems equipped with Conference /TDS / MF Sender cards.	ftc-14
XCAD		XCT (NT8D17 Conference/TDS) Cadence number (FCAD cadence number) The default range of a XCAD prompt changes according to the tone-type prompt (e.g. DBCS, HOWL, etc.) which precedes it.	ftc-19
XTON	0-255	XCT (NT8D17 Conference/TDS) Tone code	ftc-19
